

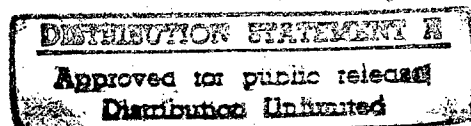
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SELECTED TRANSLATIONS OF
ABSTRACTS IN REFERATIVNYY ZHURNAL - BIOLOGIYA, No. 6, 1959

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SELECTED TRANSLATIONS OF
ABSTRACTS IN REFERATIVNYY ZHURNAL - BIOLOGIYA, No. 6, 1959

This report consists of complete translations of the Russian-language abstracts of articles, which were originally published in the Sino-Soviet bloc and in Yugoslavia.

The Soviet subject classification system used in the original Russian language abstracts has been followed in this publication.

USSR / Microbiology. General Microbiology. Physiology and Biochemistry. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23894

Author : Ruban, Ye. L.
Inst : Academy of Sciences USSR
Title : Synthesis of Vitamins in Cultures of Nitrosomonas Europaea

Orig Pub : Dokl. AN SSSR, 1958, 120, No 1, 193-194

Abstract : The addition to the silicate jelly culture medium of Winogradsky of vitamins B₁, B₆, biotin, pantothenic and nicotinic acids, inosite, PABA, riboflavin, and ascorbic acid, each separately or in various combinations, did not stimulate the accumulation of biomass of Nitrosomonas europaea; it also did not increase the intensity of NO₂ accumulation in

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USSR / Microbiology. General Microbiology. Physiology and Biochemistry. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23894

the cultures of this micro-organism. Autolysates of the bacteria contain some amounts of vitamin B₁, biotin, inosite, vitamin B₆, nicotinic and pantothenic acids, since they sustain the growth of yeasts which need these vitamins in the cultivation of the yeasts on vitamin-free media. In the presence of Co in the medium, Nitrosomonas synthesize vitamin B₁₂ in the amount of 0.00325 μ /mg. -- G. M. Shavlovskiy

Card 2/2

POLAND / Microbiology. General Microbiology. Physiology F
and Biochemistry.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23897

Author : Smyk, Boleslaw

Inst : Not given

Title : The Investigation of Lactobacilli. L. The
Influence of Various Growth Factors

Orig Pub : Roczn. nauk rolniczych, 1957, B71, No 2,
301-312

Abstract : Extracts of alfalfa, lupine, malt and liver
extracts, pantothenic acid, and nicotinic acid
amide stimulated most actively the formation
of lactic acid by lactobacilli. Vitamins and
extracts of alfalfa, lupine, and malt sprouts
induced an activating influence on the bacilli
which were found in silo (Lactobacillus

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POLAND / Microbiology. General Microbiology. Physiology F
and Biochemistry.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23897

arabinosus, L. leichmannii, Streptobacterium
plantarum). On homoenzymal thermophyle
bacteria, such as Thermobacterium lactis, Th.
helveticum, Th. bulgaricum, and Streptococcus
thermophilus, liver extract, yeast extract,
and extract of cattle manure also act. --
From the author's resume

Card 2/2

GDR / Microbiology. General Microbiology. Physiology
and Biochemistry.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23905
Author : Emanueloff, I.; Natscheff, L.; Veltscheva, P.
Inst : Not given
Title : Investigation of Bacteria That Synthesize
Vitamin B₁₂
Orig Pub : Dokl. Bolg. AN, 1957, 10, No 4, 325-329

Abstract : The ability to synthesize vitamin B₁₂ (I)
was studied in 2 strains of *Bacillus mesentericus*, in *B. megatherium*, *B. alcaligenes*, *B. mycoides*, *B. coli commune* and *Clostridium sporogenes*, which were grown on a medium prepared from wheat bran and potatoes. I in the medium was determined by means of *Euglena gracilis* var. *bacillaris*. The most active

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and Biochemistry.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23905

producer of I turned out to be one of the strains of *B. mesentericus*. The maximum accumulation of I was assured by a medium which consisted of equal amounts of bran and potatoes, as well as by an oats medium with the addition of mineral salts. The bacterium synthesized cyanocobalamin as well as pseudovitamin B₁₂, which was determined chromatographically. The addition of a medium on which bacteria were cultivated into the feed of chicks stimulated their growth. -- G. M. Shavlovskiy

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BULGARIA / Microbiology. General Microbiology.
Physiology and Biochemistry.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23906
Author : Emanuilov, Ign.; Nachev, L.; Velcheva, P.
Inst : Microbiological Institute
Title : Investigation of Bacteria That Synthesize
Vitamin B₁₂
Orig Pub : Izv. Mikrobiol. in-t, Bolg. AN, 1958, kn. 9,
73-83
Abstract : See Previous Abstract

Card 1/1

BULGARIA / Microbiology. General Microbiology.
Physiology and Biochemistry.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23907
Author : Grigorov, Iv.
Inst : Microbiological Institute
Title : Investigation of the Ability of Actinomyces,
Isolated from Various Types of Manure, to
Form Vitamin B₁₂
Orig Pub : Izv. Mikrobiol. in-t, Bolg. AN, 1958, kn. 9,
153-159
Abstract : 21 strains of actinomyces, isolated from
manure, were grown on a medium with CoNO₃.
By means of Euglena gracilis, vitamin B₁₂
was discovered in the culture fluid of all
strains. The amount of the vitamin in the
medium is directly proportional to the amount

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Physiology and Biochemistry.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23907

of biomass built up. -- From the authors'
resume

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GDR / Microbiology. General Microbiology. Physiology
and Biochemistry.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23918

Author : Haenel, H.

Inst : Not given

Title : Microbiological Determination of Vitamins

Orig Pub : Die Nahrung, 1958, 2, No 4, 362-370

Abstract : Descriptions of microbiological methods of
determination of vitamins of group B are
cited. The utilized test-organisms and the
composition of nutrient media for cultivation
of strains and determination of vitamins are
listed.

Card 1/1

BULGARIA / Microbiology. General Microbiology.
Physiology and Biochemistry.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23926
Author : Mitev; Pashev; Kharizanova; Lambrev; Beshkov
Inst : Microbiological Institute
Title : Influence of Various Factors on Biosynthesis
of L-Ascorbic Acid by Mold Fungi
Orig Pub : Izv. Mikrobiol. in-t, Bolg. AN, 1957, 8,
209-221
Abstract : No abstract given

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USSR / Microbiology. General Microbiology. Physiology
and Biochemistry.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23929D
Author : Trifonova, Z. V.
Inst : Moscow Veterinarian Academy
Title : The Influence of Carbohydrate and Vitamin
Nutrition on Cultural-Morphological and Toxic
Properties of the Fungus Stachybotrys
alternans
Orig Pub : Avtoref. diss. kand. biol. n., Mosk. vet.
akad., M., 1958
Abstract : No abstract given

Card 1/1

USSR / Microbiology. General Microbiology. Micro-organisms of Water and Air.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23952

Author : Kuznetsov, S. I.

Inst : Institute of Microbiology

Title : The Basic Means of Formation of Calcium Carbonate Sediments in Sweet-Water Reservoirs and the Role of Microorganisms in this Process

Orig Pub : Tr. In-ta mikrobiol, AN SSSR, 1958, vyp 5, 170-185

Abstract : Three types of processes were studied as a result of which the formation of CaCO_3 sediments in natural reservoirs with participation of bacteria is possible. To the first type belong reservoirs with alkaline water, similar to Lake Sevan, where sedimentation of CaCO_3

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USSR / Microbiology. General Microbiology. Micro-organisms of Water and Air.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23952

takes place by precipitation from a saturated solution. In this case the role of bacteria in the calcite sedimentation is small. In reservoirs of the second type, an example of which is Lake Belovod', this process is conditioned by the activity of sulfate-reducing bacteria, which accomplish the restoration of CaSO_4 in CaS , and calcite is formed secondarily by interaction of the latter with carbon dioxide. In reservoirs of the third type, to which Lake Viysyaagu (Estonia) may be referred, calcite is deposited as a result of decomposition of calcium humate by bacteria. In all studied cases, the participation of bacteria in the formation of a sediment of

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USSR / Microbiology. General Microbiology. Micro-organisms of Water and Air.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23952

calcium carbonate is adapted to the silt deposits and is absent in the water mass. --
V. A. Lambina

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USSR / Microbiology. General Microbiology. Micro-organisms of Water and Air.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23953

Author : Sorokin, Yu. I.

Inst : Not given

Title : The Role of Chemo-synthesis in the Production of Organic Substances in Water Reservoirs.
II. The Study of Chemo-synthesis in Silt Deposits by Means of Cl^{14}

Orig Pub : Mikrobiologiya, 1958, 27, No 2, 206-213

Abstract : The amount of organic substance of bacterial biomass newly formed every 24 hours in silts (Skh) was determined by the more precise method of the author (RZhBiol., 1956, 43583, 1957, 40154) according to the following formula:

$$Skh = \frac{r \cdot Sk \cdot 100}{R \cdot P \cdot n} \text{ ml of carbon per liter of}$$

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F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23953

silt in 24 hours, where P is the volume of silt (ml), n is the time of incubation (24 hours); Sk is the content of CO₂ in the silt, r is the radioactivity of the newly-formed organic substance of bacteria biomass, and R is the radioactivity of Na₂C¹⁴O₃ (number of impulses per min.) brought into the experiments. The examination of silts from the Rybinsky, Gor'kovsky and Kuybyshevsky water reservoirs showed that the greatest amount of Skh (3-6 mg C l. in 24 hr.) is found in fresh silts of new water reservoirs. The temperature coefficient of chemo-synthesis under conditions near natural, Q₁₀⁰ = 1.6-1.9. The speed of chemo-synthesis increases several

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F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23953

times with the addition to silts of easily assimilated organic substances (glucose, calcium lactate and sodium formate) under anaerobic conditions. Under aerobic conditions, these additions do not influence essentially the value of chemo-synthesis, i.e., in silts this process is related energetically with the anaerobic decomposition of organic substance. -- A. S. Razumov

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USSR / Microbiology. General Microbiology. Micro-organisms of Water and Air.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23954

Author : Kriss, A. Ye.
Inst : Institute of Microbiology
Title : The Microbe Population of the Ocean in the Area of the North Pole

Orig Pub : Tr. in-ta Mikrobiol., AN SSSR, 1958, vyp 5, 186-198

Abstract : The problem of the existence of bacterial life in the Central Arctic, in the depths of the Arctic Ocean under the polar pack ice, away from the direct influence of continental or island run-offs, is being solved. Investigations were conducted on drifting scientific stations at almost every depth. Their number

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F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23954

fluctuated from 35 to several thousand cells per one l. In the vertical direction, a noticeably expressed micro- and macrozonality of distribution of their numbers was observed. The amount of heterotrophic bacteria in the surface layers of the ocean was considerably higher in July tests than in September tests. Heterotrophic microorganisms are basically represented by staff-form, non-sporogenous forms. Cocci, sporogenous bacteria and yeasts are also found. Data on general numerousness of microorganisms along an entire vertical of the ocean in the area of the North Pole in July and September are cited. The biomass of microbe cells in the upper layers of the ocean

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F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23954

composes the units of mg/m^3 of water, falling with the depth to hundredths and thousandths of mg/m^3 . The 24-hour increase of the biomass of microorganisms is 12-72%. In 1 g of natural silt, from 4 to 304 mil. of microbe cells were contained. -- V. A. Lambina

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USSR / Microbiology. General Microbiology. Micro-organisms of Water and Air.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23955

Author : Kriss, A. Ye.

Inst : Not given

Title : Microbiology and Problems of the Black Sea

Orig Pub : Priroda, 1958, No 6, 43-48

Abstract : No abstract given

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USSR / Microbiology. General Microbiology. Geological Activity. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23958

Author : Isachenko, B. L.
Inst : Institute of Microbiology
Title : On the Genesis of Sulfur Beds

Orig Pub : Tr. In-ta mikrobiol. AN SSSR, 1958, vyp 5, 18-23

Abstract : Proceeding from the contemporary concepts of the role of microorganisms in biochemical processes of sulphur rotation in nature, the author cites deliberations on the possible significance of these processes during the far-removed geological periods of Earth's history and in the formation of deposits of sulphur-containing rocks and crystalline sulphur. -- V. A. Lambina

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USSR / Microbiology. General Microbiology. Geological Activity. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23959

Author : Ivanov, M. V.
Inst : Not given
Title : The Participation of Microorganisms in the Formation of Sulphur Deposits in Shor-Su

Orig Pub : Mikrobiologiya, 1957, 26, No 5, 544-550

Abstract : From sulphur-hydrogen waters occurring below the petroleum layer of the Shor-Su formation, desulfurizing bacteria have been isolated. The ability of these bacteria to form H_2S was proven by means of sulfate stained for sulphur. Desulfurizing bacteria were discovered in all the investigated sulphur-hydrogen waters. The intensity of sulfate-reduction induced by

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USSR / Microbiology. General Microbiology. Geological F
Activity.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23959

them reaches 0.179 mg H₂S per one l. per day. In slimy sulphur-containing sediments which are located at places of contact of sulphur-hydrogen waters with O₂, thiono acid bacteria of the type Thiobacillus thioparus were discovered. In some places the number of these bacteria reaches 100,000 cells per 1 cm³ of sulphur deposits. It is assumed that microorganisms play an essential part in the process of accumulation of sulphur in the Shor-Su formation. -- G. I. Vorob'yeva

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USSR / Microbiology. General Microbiology. Geological F
Activity.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23960

Author : Ivanov, M. V
Inst : Not given
Title : The Utilization of Isotopes for Studying the Role of Microorganisms in the Formation of the Shor-Su Sulphur Formation

Orig Pub : V sb.: Izuch. zhivotn. organizma, M., AN SSSR, 1958, 247-253

Abstract : Into flasks with samples stained for sulphur, of hydrogen sulphide solutions from the cracks and drips of the Shor-Su mines, Na₂SO₄ was introduced with an activity of 20-40 curie with the calculation of process intensity after 3-9 days according to the method of the author

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USSR / Microbiology. General Microbiology. Geological F
Activity.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23960

(RZhBiol., 1957, 85561). The computed intensity of the process was 0.009-0.179 H₂S mg/l per day only in samples with living microflora (without addition of formalin) and those richer in organic substance (in petroleum layers). The intensity of oxidation of H₂S and deposition of S was determined in similar flasks with a small volume of air over the samples of hydrogen sulphide solutions, into which Na₂S³⁵ (activity 1-1.5 curie/l), was introduced, which were preserved under the conditions of the place of their selection. Biological oxidation (in samples without formalin) took place more intensively than did the chemical one (with addition of formalin) and had, in one drift, an

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Activity.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23960

output of 2880 l per day and a content of 138 mg/l of H₂S - 190 g of S per day. Thus, it is shown that the formation of H₂S and deposition of S in the subsurface waters of sulphur and petroleum beds of Shor-Su, takes place with the participation of microorganisms. --
A. S. Razumov

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USSR / Microbiology. General Microbiology. Geological Activity. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23962

Author : Kuznetsova, V. A.; Ashirov, K. B.; Gromovich, V. A.; Ovchinnikova, I. V.; Kuznetsov, S. I.

Inst : Not given

Title : Experiment of Suppressing the Development of Sulfate Restoring Bacteria in a Petroleum Layer of Kalinovskiy Bed

Orig Pub : Mikrobiologiya, 1957, 26, No 3, 330-337

Abstract : A relation has been established between the presence of a great amount of H_2S in a petroleum layer and the amount of sulfate-restoring bacteria. The activity of sulfate-restoring bacteria under the conditions of salty layer waters was proven, as well as their

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USSR / Microbiology. General Microbiology. Geological Activity. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23962

utilization of petroleum as a source of organic substance. The addition of formalin (about 400 mg/l) to the water before tossing it into the well (Kalinovskiy Deposit, Kuybyshevskoy Oblast') led to the suppression of bacterial development in neighboring wells connected with the experimental well by a common flow of layer waters. By this, a real possibility for terminating bacterial formation of H_2S was determined.

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USSR / Microbiology. General Microbiology. Geological F
Activity.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23963

Author : Kuznetsov, S. I.; Telegina, Z. P.

Inst : Not given

Title : Some Data on the Physiology of Propane Oxidizing
Bacteria

Orig Pub : Mikrobiologiya, 1957, 26, No 5, 513-518

Abstract : From the subsoil floor of the various regions
of Soviet Union, where microbiological searches
for petroleum were being conducted, several
pure cultures of propane oxidizing bacteria
were isolated. Of four cultures, three were
related to mycobacteria and one to p.
Pseudomonas. The addition of glucose (experi-
ments in a Warburg apparatus) before introduction

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USSR / Microbiology. General Microbiology. Geological F
Activity.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23963

of propane increased the consumption of O₂
by 1.5-2 times as compared with endogenic
respiration, while the addition of propane
increased the consumption of O₂ by 4-10 times.
I.e., these bacteria, in the presence of
propane, do not utilize the easily-oxidizing
organic compounds. The propane oxidizing
bacteria are able to absorb free CO₂ (experi-
ments with C¹⁴O₂) by the chemo-synthesis
process; furthermore, oxidation of propane
serves as the source of energy. It is
assumed that propane oxidizing bacteria are
reliable indicators of petroleum.

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USSR / Microbiology. General Microbiology. Geological Activity. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23964

Author : Mar, G. I.; Stasilevich, Z. K.
Inst : Karaganda Medical Institute
Title : Microbiological Characteristics of Mud from Lake Karasor

Orig Pub : Tr. Karanadinsk. med. in-ta, 1957, 1, No 8, 527-528

Abstract : No abstract given

Card 1/1

HUNGARY / Microbiology. General Microbiology. Geological Activity. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 23986

Author : Goreczky, Laszlo
Inst : Not given
Title : On the Bactericidal and Stimulating Action of Protein Serum Fractions on Bacteria

Orig Pub : Kiserl. orvostud., 1957, 9, No 5-6, 526-531

Abstract : Albumin, and, to a lesser degree, gamma-globulin, possess bactericidal action; beta-globulin stimulates the development of Micrococcus aureus.

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USSR / Microbiology. General Microbiology. Geological F
Activity.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24007

Author : Malkov, A. M.; Suprunenko, A. I.

Inst : Not given

Title : The Influence of 2,4-Dinitrophenol on Aerobic
Fermentation and Synthesis of Pyrophosphoric
Compounds by Yeasts in the Process of Their
Multiplication

Orig Pub : Mikrobiologiya, 1958, 27, No 1, 12-18

Abstract : The influence of 2,4-dinitrophenol on aerobic
fermentation, respiration, content of pyro-
phosphates (P_7), and multiplication of pressed
baker's yeast was investigated. 2,4-dinitro-
phenol in a concentration of 0.0002-0.00002 M
activates the fermentation and increases the

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USSR / Microbiology. General Microbiology. Geological F
Activity.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24007

synthesis of phosphates rich in energy; higher
concentrations act inhibitingly. Respiration
is activated under a concentration of 0.00002
M; 2,4-dinitrophenol separates the processes
of fermentation and respiration from yeast
multiplication, 0.0002 M delays, and higher
concentrations suppress completely the process
of yeast multiplication. It is assumed that
the increase of synthesis of phosphates rich
in energy under increased concentrations of
2,4-dinitrophenol takes place by reversible
action of pyrophosphatase enzymes. -- M. V.
Fateyeva

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USSR / Microbiology. General Microbiology. Geological F
Activity.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24012

Author : Sokolov, B. V.
Inst : Leningrad Chemical-Pharmaceutical Institute
Title : The Influence of Various Chemical Antiseptics
on Yeast-Like Fungi of the Type Candida

Orig Pub : Sb. nauchn. tr. Leningr. khim. farmatsevt.
in-t, 1957, 3, 178-182

Abstract : The action of the most common chemical antiseptics on 52 cultures of Candida was studied. Formalin proved to be the most active, after which, in order of decrease of activity, there follow: chloramine, copper sulfate, carbolic and boric acids. Fungicidal and fungistatic concentrations frequently coincide. The

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USSR / Microbiology. General Microbiology. Geological F
Activity.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24012

resistance of various types is unequal; the most stable are *C. krusei*, the least - *C. pseudotropicalis*. The stability of cultures to chemical antiseptics coincides with their stability to some antibiotics (gramicidin and others). Gross variations may appear in the influence of subfungicidal doses of substances.
-- M. I. Nakhimovskaya

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CZECHOSLOVAKIA / Microbiology. General Microbiology.
Geological Activity.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24013

Author : Bomar, Miroslav

Inst : Not given

Title : On the Problem of Studying Bactericidal
Stability of Poly-ε-Caprolactam

Orig Pub : Chem. prumysl, 1957, 7, No 3, 153-155

Abstract : Microorganisms destroy poly-ε-caprolactam only
if it is in a nutrient medium. Monomeric ε-
caprolactam inhibits the microorganisms in high
concentrations and stimulates them in low
concentrations. -- From the author's resume

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USSR / Microbiology. General Microbiology. Geological
Activity.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24017

Author : Karpovich, Ye. A.; Kostenich, N. A.;
Viktorskiy, A. P.

Inst : Belorussian Scientific Research Dermo-
Venerological Institute

Title : The Influence of Phtivazide, Heptyl-Resorcin,
and Hexyl-Resorcin on Cultures of Dermatophytes

Orig Pub : Sb. nauchn. rabot. Belorussk. n.-i. kozhno-
venerol. in-t, 1957, 5, 322-323

Abstract : Hexyl-resorcin possesses clearly-expressed
fungistatic and fungicidal properties with
respect to Trichophyton and Achorion
Schonleini.

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NORTH KOREA / Microbiology. General Microbiology.
Geological Activity.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24018

Author : Lyu, Gyn-Man; Tsoi i Ren

Inst : Not given

Title : On Synthesis of Derivatives of Aryl Mercury
and Their Bacteriocidity

Orig Pub : Choson yakkhak, 1957, No 3, 29-39

Abstract : No abstract given

Card 1/1

USSR / Microbiology. General Microbiology. Geological
Activity.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24020

Author : Kosikov, K. V.; Iyerusalimskiy, N. D.

Inst : Academy of Sciences USSR

Title : Symposium on the Mechanism of Development of
Toxistability in Microorganisms in London

Orig Pub : Izv. AN SSSR, Ser. biol., 1958, No 1, 118-120

Abstract : No abstract given

Card 1/1

POLAND / Microbiology. Antibiosis and Symbiosis.
Antibiotics. Antibiosis.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24022

Author : Moycho, W.: Gromska, W.

Inst : Not given

Title : The Antagonistic Action of Streptococcus lactis
on Bacillus subtilis and Pseudomonas fluorescens
in Milk

Orig Pub : Acta microbiol. polon., 1956, 5, No 1-2, 267-270

Abstract : S. lactis in growth in mixed cultures in milk
with B. subtilis and P. fluorescens suppresses
the growth of B. subtilis and almost does not
influence Pseudomonas. The inhibition is
connected with the formation of antibiotics
and not of lactic acid. Under the influence
of an antibiotic, the relation of some bacteria

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POLAND / Microbiology. Antibiosis and Symbiosis.
Antibiotics. Antibiosis.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24022

to Gram staining changed. -- From the authors'
resume

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POLAND / Microbiology. Antibiosis and Symbiosis.
Antibiotics. Antibiosis.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24023
Author : Lachowicz, Tadeusz
Inst : Not given
Title : Antagonism Between Strains of Colon Bacillus
Orig Pub : Med. doswiad. i mikrobiol., 1958, 10, No 1,
35-40

Abstract : Antagonism was discovered between two sero-
logically different strains of Escherishia coli.
The mechanism of the antagonistic action was
not clarified. -- From the author's resume

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USSR / Microbiology. Antibiosis and Symbiosis.
Antibiotics. Antibiosis.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24026
Author : Kirakosyan, A. V.: Karimyan, R. S.
Inst : Not given
Title : Intraspecific and Interspecific Interrelations
of Azotobacter
Orig Pub : Mikrobiol. sb. AN ArmSSR, 1958, vyp 9, 3-22

Abstract : The intraspecific and interspecific inter-
relations were studied in 280 cultures of
azotobacter, isolated from various types of
soil of the Armenian SSR (190 cultures of
Azotobacter chroococcum, 64 of A. nigricans,
21 of A. agile and 3 of A. vinelandii).
Antagonistic interrelations were discovered
not only between the various types of azotobacter

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USSR / Microbiology. Antibiosis and Symbiosis.
Antibiotics. Antibiosis.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24026

but also between the various strains of one and the same type. 32% of tested cultures manifested intraspecific antagonistic action. The largest percentage of intraspecific antagonists was discovered among the representatives of species of *Az. chroococcum*. The cultures of *azotobacter* with strong antagonistic action are usually antagonists with respect to the greatest number of cultures intraspecifically, as well as among other types of *azotobacter*, and are themselves, as a rule, rarely subject to antagonistic action of other cultures of *azotobacter*. No correlation was discovered between the type of soil and the presence of antagonistic properties in

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Antibiotics. Antibiosis.

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24026

cultures of *azotobacter* isolated from it. --
T. A. Kalininskaya

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USSR / Microbiology. Antibiosis and Symbiosis. F
Antibiotics. Antibiosis.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24027

Author : Mal'tseva, N. M.

Inst : Not given

Title : The Interrelations of Azotobacter with Bacillus
mycoides

Orig Pub : Mikrobiol. zh., 1957, 19, No 4, 30-34

Abstract : From various soils of the Ukrainian SSR,
31 strains of B. mycoides were isolated, of
which 21 strains inhibited the growth of
azotobacter. 2 strains stimulated it, and
the rest did not influence it. The combined
cultivation of azotobacter with B. mycoides
induced a decrease of the nitrogen-fixing
activity of azotobacter. On the basis of the

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Antibiotics. Antibiosis.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24027

study of the properties of active substance
produced by B. mycoides, which inhibits the
growth of azotobacter, the author arrives at
the conclusion that it is a polypeptide. --
T. A. Kalininskaya

Card 2/2

USSR / Microbiology. Antibiosis and Symbiosis.
Antibiotics. Antibiosis.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24028
Author : Afrikyan, E. K.; Tumanyan, V. G.
Inst : Not given
Title : The Antagonistic Action of Soil Micro-organisms on Cultures of Bacterium Radicicola
Orig Pub : Izv. AN ArmSSR. Biol. i s.-kh. n., 1958, 11, No 2, 37-46

Abstract : Various degrees of antagonistic action of actinomyces, sporogenous and non-sporogenous bacteria with respect to B. radiculicola (BR) were established. It was shown that the strongest antagonists to BR are found among the bacilli of the group Bac. subtilis-mesentericus and Bac. circulans-polymyxa, and among

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Antibiotics. Antibiosis.

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24028

the actinomyces in Act. griseus and Act. globisporus. The sensitivity of various cultures of BR to the action of antagonists is various, and this index may be utilized in the systematics of ecological strains of BR.
-- A. G. Kuchayeva

Card 2/2

POLAND / Microbiology. Antibiosis and Symbiosis. F
Antibiotics. Antibiosis.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24034

Author : Mordarski, Marian; Jedrzejewska-Tkaczowa,
Alicja; Harasymowicz, Maria

Inst : Not given

Title : Antibacterial Properties of Actinomyces:
II. Antagonistic Action of Actinomyces on
the Growth of Other Microorganisms

Orig Pub : Arch. immunol. i terap. doswiadc., 1957, 5,
231-248

Abstract : Antagonistic properties of 6601 strains of
actinomyces were studied. The tested micro-
organisms were planted on dishes with an
8-16-day-old culture of actinomyces. 76.8%
of strains possessed antagonistic properties.

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POLAND / Microbiology. Antibiosis and Symbiosis. F
Antibiotics. Antibiosis.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24034

Many cultures turned out to be antagonists
of Candida albicans and dysentery bacteria.
-- M. I. Nakhimovskaya

Card 2/2

USSR / Microbiology. Antibiosis and Symbiosis.
Antibiotics. Antibiosis.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24038

Author : Isakova, N. P.
Inst : All-Union Academy of Agricultural Sciences
imeni V. I. Lenin
Title : New Variation of Bacterium of the Type Bac.
cereus Frankland, Pathogenic for Insects

Orig Pub : Dokl. VASKHNIL, 1958, No 3, 26-27

Abstract : No abstract given

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USSR / Microbiology. Antibiosis and Symbiosis.
Antibiotics. Antibiosis.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24039

Author : Lizgunova, A. V.
Inst : Not given
Title : Rival Interrelations Between Normal Micro-
flora of the Skin and Microbes Which Fall on
it Temporarily

Orig Pub : Zh. mikrobiol., epidemiol. i immunobiol.,
1958, No 2, 126

Abstract : No abstract given

Card 1/1

USSR / Microbiology. Microbes Pathogenic for Man and
Animals. General Problems.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24040

Author : Vershigora, A. Ye.

Inst : Not given

Title : Hermetic Chamber for Experimental Work with
Bacterial Aerosols

Orig Pub : Zh. mikrobiol., epidemiol. i immunobiol.,
1958, No 6, 105-108

Abstract : A description is given of a chamber with
dimensions of 120 x 80 x 70 cm, constructed
of sheet metal and divided by partitions into
three parts, 200 l. each. In each part there
is a window for observations and 2 hermeti-
cally-sealing openings. In the compartments,
equal concentrations of bacterial aerosols

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Animals. General Problems.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24040

are created, which permit the conducting of
three parallel experiments. The chamber is
meant for the study of kinetic properties of
bacterial aerosols in the dust and drip phase,
and for the evaluation of the effectiveness
of catching bacteria by means of various de-
vices. The chamber can easily be further
equipped for the work with pathogenic
bacteria. -- V. V. Vlodavets

Card 2/2

BULGARIA / Microbiology. Microbes Pathogenic for Man
and Animals. General Problems.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24042
Author : Pisarev, S. I.; Yefremova, A.; Kiprov, D. I.
Inst : Medical Institute of Bulgaria
Title : Serological and Bacteriological Investigations
in Experimental Myocarditis in a Dog
Orig Pub : Izv. Med. in-ti. Bolg. AN, 1957, kn. 14,
187-203

Abstract : No abstract given

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USSR / Microbiology. Microbes Pathogenic for Man and
Animals. General Problems.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24043
Author : Stoyanovskiy, A. F.; Prominskaya, T. V.;
Zontovich, Ye. V.
Inst : Not given
Title : An Experiment of Practical Application of the
Method of Agglutination of Microbe Association
(Mixed Cultures) to the Solution of Various
Problems
Orig Pub : Vrachebn. delo, 1957, prilozh., 112

Abstract : The method is based on the discovery in mi-
crobe associations (rinsing of culture) of
specific antigens-causative agents of intesti-
nal infections or para-agglutinating strains
of intestinal bacteria corresponding to them.

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Animals. General Problems.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24043

It gives an idea of the degree and the
freshness of epidemiologically dangerous
pollution of various objects of external
environment (beaches, well water, beverages).
The application of the method along with the
titer of coli, enables one to diagnose
relatively quickly the presence of fresh
fecal pollution. -- G. Ye. Frumkina

Card 2/2

USSR / Microbiology. Microbes Pathogenic for Man and
Animals. General Problems.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24045

Author : Kiyashov, A. P.

Inst : Not given

Title : The Influence of a 3% Solution of Zinc
Sulfate on Pathogenic Flora of Glove Juice

Orig Pub : Khirurgiya, 1958, No 2, 107-111

Abstract : The bactericidal action of $ZnSO_4$ on glove
juice was studied. In the first series of
experiments, a culture of glove juice was
made in test tubes with BPM. 90 experiments
were performed with the glove juice of 228
surgeons-participants in the operation. The
average duration of surgery was 47 min. Be-
fore surgery, the hands were treated with

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Animals. General Problems.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24045

warmed 3% solution of ZnSO₄; the gloves were
sterilized. The average percentage of
sterility (absence of growth) was 67.9. In
the second series of experiments, cultures
were made on APM and the number of grown
colonies was computed. The average number of
grown colonies was 2.5. In both experiments,
the cultures were grown under 37° in the
course of 3 days. Presurgical treatment of
hands with ZnSO₄ is recommended. -- V. H.
Roykhel'

Card 2/2

RUMANIA / Microbiology. Microbes Pathogenic for Man
and Animals. General Problems.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24048

Author : Dimitriu, Ofelia; Micu, Dumitru
Inst : Not given
Title : Hemocultures of L Forms

Orig Pub : Studii si cercetari inframicrobiol., microbiol.
si parasitol., 1957, 8, No 2, 289-296

Abstract : In 8 cases, blood cultures of 110 patients
with hypertonia, septic endocarditis, unde-
termined subfebrile conditions, subjected to
therapeutic treatment or treatment with anti-
biotics gave, in a broth with 20/00 of glucose,
a growth in the shape of a small cloud from
which, in passages on solid serum, media cul-
tures of L-forms (peculiar character of

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RUMANIA / Microbiology. Microbes Pathogenic for Man
and Animals. General Problems.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24048

colonies, morphologically-large balls) were isolated. The original cultures in broth are kept for the duration of 30 days, and sub-cultures to solid media for 10-12 days. --
From the authors' resume

Card 2/2

USSR / Microbiology. Microbes Pathogenic for Man and
Animals. General Problems.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24051

Author : Busygina, N. G.

Inst : L'vov Scientific Research Institute for
Protection of Mother and Child

Title : Microflora of Pus and Breast Milk in Post-
natal Mastitis

Orig Pub : Sb. nauchn. rabot L'vovsk. n.-i. okhrany
materinstva i detstva, 1954, vyp 1, 86-89

Abstract : From the pus in mastites, Staphylococcus
aureus is most frequently (in 88%) isolated;
which, in 80%, is determined in a pure cul-
ture. 96.4% of isolated St. aureus coagulated
the plasma, 79.3% fermented mannite, and 57.4%
induced hemolysis of rabbit erythrocytes. It

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Animals. General Problems.

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24051

was established that in mastites the micro-
flora in pus and milk is identical. From
the breast milk and the skin of the nipples
of healthy puerpera, staphylococci were also
isolated, part of which possessed pathogenic
properties. The author recommends the treat-
ment of nipples with a mixture of alcohol
with iodine for mastitis prophylaxis. --
V. V. Vlodavets

Card 2/2

COMMUNIST CHINA / Microbiology. Microbes Pathogenic
for Man and Animals. General Problems.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24057

Author : Wan, Kuo-T'ai; Hsu, Shih-Yung

Inst : Not given

Title : Analysis of 31 Cases of Bacterial Abscess
of the Liver

Orig Pub : Chung-hua wai-k'e tsa-chih, 1958, 6, No 6,
681-683

Abstract : No abstract given

Card 1/1

USSR / Microbiology. Microbes Pathogenic for Man and
Animals. General Problems.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24059

Author : Artem'yeva, Ye.
Inst : Moscow Pharmaceutical Institute
Title : Microbe Pollution of Eye Drops Obtained from
Moscow Pharmacies

Orig Pub : Nauchn. raboty stud. Mosk. farmatsevt, in-ta,
1957, vyp 1, 99-100

Abstract : The bacterial pollution was studied of 5
samples of zinc eye drops - a 0.25% solution
of zinc sulfate in distilled water. The total
number of bacteria in 1 ml of drops, 7-18
hours after preparation, fluctuated between
8230 to 10,000 (in one case, total growth); in
two cases, hemolytic flora were discovered,

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Animals. General Problems.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24059

and in all cases - growth on Endo's culture.
The introduction of the isolated cultures of
bacteria into injured sclera of the eye of
guinea pigs induced the development of an
inflammatory process. -- V. V. Vlodavets

Card 2/2

USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Hemophilus Bacteria.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24062
Author : Zakharova, M. S.; Palkina, N. A.
Inst : Not given
Title : A Nutrient Medium for Cultivation of Whooping
Cough Microbes
Orig Pub : Materialy po obmeny opytom. Gl. upr. in-tov
vaksin i syvorotok M-va zdravookhr. SSSR,
1956, 2/52, 45-49

Abstract : Technical, acidic, first grade (GOST No.1211-
41) casein is washed off with a 0.2% solution
of acetic acid for 6-7 days, changing the
solution 2-3 times daily, rinsed with distilled
water, pressed out, and dried under 60-70°.
In a glass container, 400 g. of casein, 400 ml.

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and Animals. Bacteria. Hemophilus Bacteria.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24062

of chemically-pure hydrochloric acid, and 200
ml. of distilled water are mixed. The mixture
is autoclaved for 3 hours under 127°. After
autoclaving, the hydrolysate is diluted with
distilled water to twice the volume, filtered
through paper, diluted again to three times
the volume, and illuminated by activated carbon:
20 g. of carbon (activated, ligneous illuminat-
ing, Type A, GOST 4453-48) to 1 l. The mixture
is boiled for 10 min. and filtered through
linen. From 400 g. of casein, about 5 l. of
hydrolysate are obtained, which may be pre-
served for a long time with 1% of chloroform
under 5-7°. Yeast dialysate is prepared from
fresh-bread pressed yeast. 1 kg. of yeast is

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USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Hemophilus Bacteria.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24062

mixed into 1 l. of distilled water, poured into a cellophane bag rinsed out with distilled water. For dialysis, the bag is submerged in an enameled pot with 2 l. of distilled water. Dialysis is conducted for 7 hours under 70-80°, then the contents of the pot are poured into a large bottle, which is filled up with chloroform and preserved under 5-7° up to 3 months. The contents of the medium: casein hydrolysate 170 ml, NaCl 2.5 g, KH₂PO₄ 0.5 g, MgCl₂ 0.4 g, dissolving starch 1.5 g, CaCl₂ 0.01 g, FeSO₄ 0.01, CuSO₄ 0.05 g, cysteine 0.03 g, yeast dialysate 50 ml, agar-agar 25 g, activated carbon, 2 g, distilled water up to 1 l. (In prepared medium, the content of amine nitrogen is

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24062

150-160 mg%.) In an enameled pot are mixed 170 ml. of casein hydrolysate and 600 ml. of water; they are neutralized to a pH of 7.0, then batches of NaCl, KH₂PO₄ and MgCl₂ are introduced. The starch is previously dissolved. The other salts, cysteine, and yeast dialysate are added, in the above-mentioned sequence. The volume of the mixture is brought to 1 l. with distilled water, a pH of 7.3 is established, agar-agar is introduced, the mixture is brought to boil, activated carbon is added to it, and it is poured while stirring constantly into flasks or separating flasks, and sterilized under 110° for 30 min., then it is mixed well and poured into bottles.

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Animals. Bacteria. Hemophilus Bacteria.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24062

Secondary heating for melting is not recommended. The medium is black in color. It can be preserved in a ready state; with prevention of drying, up to 2 months. It is utilized for mass cultivation of whooping-cough microbes in the 1st phase in the preparation of whooping cough vaccine, and in the bacteriological diagnosis of whooping cough. -- L. V. Lugovaya

Card 5/5

COMMUNIST CHINA / Microbiology. Microbes Pathogenic for
Man and Animals. Bacteria. Hemophilus
Bacteria.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24063

Author : Ch'eng, Cheng-Jen; He, Ch'iu-Ming

Inst : Not given

Title : Adaptation of Haemophilus pertussis and its
Practical Application

Orig Pub : Wei-shen-wu hsueh-pao, Acta microbiol. sinica,
1957, 5, No 4, 411-416

Abstract : A culture of H. pertussis of phase I, growing
poorly of nutrient media, was passed on a
medium with starch. 2 subcultures were isolated,
which were well adapted to growth on Bordet-
Gengou culture medium with peptone. According
to their biological properties, the subcultures

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COMMUNIST CHINA / Microbiology. Microbes Pathogenic for Man and Animals. Bacteria. Hemophilus Bacteria. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24063

did not differ from the original strain and gave a greater yield of vaccine.

Card 2/2

USSR / Microbiology. Microbes Pathogenic for Man and Animals. Bacteria. Hemophilus Bacteria. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24064

Author : Bochagova, D. I.
Inst : Institute of Experimental Medicine, Academy of Sciences USSR

Title : On the Viability of Whooping Cough Bacillus in a Hydrolysate-Saline Medium and in Physiological Solution

Orig Pub : Yezhegodnik. In-ta eksperim. med. Akad. nauk SSSR, 1955, L., 1956, 309-313

Abstract : The viability of whooping cough bacillus (WB) was studied in physiological solution and in a solution of amino acids obtained in hydrolysis of casein. It was found that at room temperature and 5-6°, WB perished quickly

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F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24064

during the first 30 min. in both media.
Later WB perished slower, being preserved
much better in a hydrolysate-saline medium.
The thickness of WB suspension did not in-
fluence the speed of their perishing. Heat-
ing of a suspension of WB in physiological
solution to 37°, speeded up the perishing of
WB in direct proportion to their concentration,
but little influenced a suspension of WB in
a hydrolysate-saline medium. The author
feels that for experimental infection of
animals, it is better to utilize suspensions
of WB in a liquid hydrolysate-saline medium.
-- R. Sh. Al'tman

Card 2/2

USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Hemophilus Bacteria.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24065

Author : Osipova, P. V.
Inst : Institute of Experimental Medicine, Academy
of Sciences USSR
Title : On Characteristics of Whooping Cough Culture
18323, Highly Virulent in Intracerebral
Infection

Orig Pub : Yezhegodnik. In-t eksperm. med. AMN SSSR,
1956, T.2 (M), 1957, 395-399

Abstract : A strain of H. pertussis 18,323 isolated
by Kendrick and his co-workers was studied
with respect to its cultural, antigenic pro-
perties. Toxicity, ability to induce in-
fectionary process under various methods of

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Animals. Bacteria. Hemophilus Bacteria.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24065

infection, and immunogenic properties of various vaccines in infection with this strain, were studied. It was found that the strain was differentiated from the usual cultures of H. pertussis of the 1st phase by its ability to multiply and to induce a pathological process in the brain of mice with introduction into the brain of 100-500 microbes, leading to the death of the animals on the 5-14th day.

Card 2/2

USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Hemophilus Bacteria.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24066

Author : Anatoliy, S. A.
Inst : Institute of Experimental Medicine, Academy
of Sciences USSR

Title : On Properties of Intensely-Multiplying Cul-
tures of H. pertussis

Orig Pub : Yezhegodnik, In-ta eksperim. med. AMN SSSR,
1955, L., 1956, 289-293

Abstract : The utilization of aeration in growing cul-
tures in cellophane bags makes it possible
to bring the concentration of live microbe
cells to 8-12 bil. per 1 ml. of medium. The
antigenic properties were studied of H.
pertussis cultures, grown under conditions

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F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24066

of aeration in a liquid hydrolysate-casein medium with 6% of yeast extract and 5% of horse serum ("AER"), in cellophane bags which contained a physiological solution of NaCl and which were submerged in liquid nutrient medium (Ts-1), and in cellophane bags which contained physiological solution with horse serum, which, in this case, had not been added to the surrounding medium (Ts-2). Cultures which grew on liquid medium without aeration, or cultures with hydrolysate-casein agar which contained 10% of horse blood, served as a control. The serums of rabbits which were immunized with live H. pertussis, agglutinated live cultures of AER, Ts-1, Ts-2 up

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F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24066

to a titer of 25,600 or 12,800, or not less than the control suspension from rinsing. Boiled cultures of Ts-1 and Ts-2 were agglutinated to a considerably smaller titer (200-400) than the boiled rinse (6400) and the AER (3200). All the cultures grown under conditions of increased aeration, and the control cultures exhausted the anti-whooping cough serum in equal measure and possessed equal activity in complement fixation reaction. The toxicity of AER and Ts-1 cultures in intraperitoneal introduction to rats of 1 ml. of suspensions of rinsed microbes of various dimensions, turned out to be somewhat higher than that of the control culture from liquid

Card 3/4

USSR / Microbiology. Microbes Pathogenic for Man and
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F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24066

medium and Ts-1. Preliminary experiments
in the immunization of mice with cultures
of AER, Ts-1 and Ts-2 showed that they had
preserved their immunizing properties. --
L. V. Lugovaya

Card 4/4

USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Hemophilus Bacteria.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24067

Author : Fintiktikova, R. P.
Inst : Kharkov Scientific Research Institute of
Vaccines and Sera
Title : Immunizing Activity of Various Whooping Cough
Antigens in Experiment

Orig Pub : Tr. Khar'kovsk. n.-i. in-ta vaktsin i
syvorotok, 1957, 24, 161-164

Abstract : Mice were immunized with live cultures of
Hemophilus pertussis in coarse and smooth
forms (CF and SF), as well as with the boiled
vaccines and complete antigens, obtained
from both these forms according to the
method of Topli. Antigens of CF possessed

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F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24067

the properties of an exo- and endotoxin, and antigens of SF only endotoxic properties. Live cultures, vaccines, and antigens of each form created good immunity with respect to the strains of the same form, and a more weakly expressed one with respect to the strains of the other form. Antigen CF protected the mice from death also when exotoxin H. pertussis was introduced. Mixture of antigens from CF and SF of H. pertussis and mixture of whooping cough anatoxin with boiled whooping cough vaccine, assured almost 100% survival of mice in the introduction into them of 1-2 Dlm of live culture, as well as of antigens of both forms, and of exotoxin

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F

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H. pertussis; the control animals, immunized with whooping cough anatoxin, perished up to 100% at the introduction of live cultures of both forms and of antigen SF, and those immunized with boiled whooping cough vaccine at the introduction of dry exotoxin. Non-vaccinated mice perished 100% at the introduction of 1 Dlm of exotoxin, live cultures, and antigens of both forms. Preparations which contain a sufficient amount of exo- and endotoxin H. pertussis are quite valuable antigenically, and create reliable immunity, which it is necessary to consider in the preparation of preparations for active immunization against whooping cough. -- L. V. Lugovaya

Card 3/3

USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Hemophilus Bacteria.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24068

Author : Rozental', K. M.; Savel'vol'f, G. B.
Inst : Institute of Experimental Medicine, AMS USSR
Title : On Characteristics of Whooping-Cough
Agglutinin. On Immunogenic Properties of
Agglutinin

Orig Pub : Yezhegodnik. In-t eksperim. med. AMN SSSR,
T.2 (M), 1957, 388-392

Abstract : Immunogenic properties of whooping-cough
agglutinin (A) of 1st phase microbes were
evaluated. In the first series of experiments,
mice were immunized subcutaneously with A and
in parallel with boiled whooping-cough vaccine.
The animals were infected by means of

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F

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inhalation. The results were computed
according to the number of dead animals and
the content of bacteria in their lungs. A
turned out to be immunogenic, but immuniza-
tion with whooping cough vaccine gave better
indexes. In intraperitoneal immunization of
mice with A, and subsequent intranasal in-
fection, proofs were also obtained of good
immunogenicity of A. In the second series of
experiments was studied the preventive
action of sera of rabbits which had been
immunized with A and had agglutinated until
the multiplication (1 : 1600) of whooping
cough microbes. Sera, introduced to mice
intranasally, protected them in intranasal

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Animals. Bacteria. Hemophilus Bacteria.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24068

infection with live culture. However, the preventive properties of serum obtained in immunization with microbe suspension were higher. In the last series of experiments, the ability of A to extract preventive antibodies from sera which were obtained by means of immunization with the suspension of live culture, was determined. It was established that in utilizing great doses of A, the serum titer decreased 8 times and lost, to a considerable degree, its ability to immunize the mice in intranasal infection.

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F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24069

Author : Chistovich, G. N.; Savel'vol'f, G. B.
Inst : Institute of Experimental Medicine, AMN SSSR
Title : On Immunological Identity of the So-Called
"Toxin-Rinses" and "Thermolabine Endotoxins"
of Hemophilus Pertussis

Orig Pub : Yezhegodnik. In-t eksperim. med. AMN SSSR,
1956, T.2 (M), 1957, 393-395

Abstract : In the experiments on the neutralization of whooping cough toxin (T), various antisera (A) were studied, obtained by means of immunizing rats and rabbits with various whooping cough antigens. A was mixed with T and was introduced into the peritoneal cavity

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24069

of mice. A to live whooping cough microbes of I and IV phases, as well as A against cultures boiled and treated with formalin and whooping cough hemagglutinin, were deprived of the neutralizing action along with A to stable whooping cough antigens, obtained according to the methods of Topli, Buavena and Westphal. Expressed crossed reactions of neutralization were obtained from A of the rabbit against "toxin-rinses", prepared according to the method of Trushina, and against "endotoxins" of Teyssye. Similar results were obtained in the introduction of the mixture of these A with T to rats intracutaneously, after first keeping it in the

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24069

thermostat for 10-120 min., and then in the freezer; cross prevention of necrotic action was observed. After its exhaustion of anti-endotoxic serum by "endotoxin" of Teyssye or "toxin-rinses", the serum was deprived of neutralizing action in respect to both T. The authors feel that the "endotoxin" of Teyssye and "toxin-rinses" of Trushina are identical in the immunologic respect.

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Animals. Bacteria. Hemophilus Bacteria.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24070

Author : Bayeva, Ye. A.

Inst : Not given

Title : The Study of Antigens Obtained from H.
pertussis by the Modified Method of White and
Westphal

Orig Pub : Zh. microbiol., epidemiol. i immunobiol.,
1957, No 12, 71-74

Abstract : A strain of H. pertussis of the 1st phase
was grown on casein-carbon agar in the course
of 48 hours; the collected microbe mass was
dried with the aid of acetone under room
temperature. For obtaining an antigenic com-
plex, the methods of White and Westphal were

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Animals. Bacteria. Hemophilus Bacteria.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24070

utilized. The toxic properties of the pre-
paration, obtained according to the method
of White, turned out to be weak: a dose of 5
mg in subcutaneous introduction induced only
the decrease of weight, and in intravenous
introduction - death. It was not possible to
increase the dose, since the solubility of
the preparation is limited. In intracutaneous
introduction to a rabbit of 10 mg of prepara-
tion (4000 bil. microbe bodies), necrosis did
not form. The antigenic properties were
verified in serologic reactions and by means
of immunization of rabbits. Serologically,
the preparation turned out to be active. The
protective properties of the preparation were

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Animals. Bacteria. Hemophilus Bacteria.

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24070

studied by means of immunization of mice, with their subsequent infection with virulent whooping-cough culture. Mice immunized with the preparation of White, even in a dose of 0.4 and 0.6 mg (160 and 240 bil. microbe bodies) perished in infection! By the method of Westphal 2 fractions were obtained: an aqueous-layer fraction with pronounced toxic properties and serologically highly active, and a phenol-layer fraction with less expressed toxic properties and weak serological activity. The serological activity was checked by means of the reaction of precipitation with anti-whooping cough immune serum to the 1st phase of the microbe, by the reaction of precipitation

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Animals. Bacteria. Hemophilus Bacteria.

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Abs Jour : Ref Zhur- Biologiya, No 6, 1959, No. 24070

in agar, and complement fixation reaction. The antigenic properties of native fractions and fractions adsorbed by aluminum hydroxide were checked by the immunization of rabbits. The sera of rabbits did not contain agglutinins. Both fractions did not possess immunogenic properties (experiments on mice). The studied fractions did not possess allergic properties either. -- V. M. Roykhel'

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USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Hemophilus Bacteria, F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24072

Author : Palant, B. L.; Fintiktikova, R. P.

Inst : Not given

Title : Immunizing Properties of Complete Antigens
of H. pertussis Rendered Harmless by Specific
Sera, Which Contain an Exo- and Endotoxin of
This Microbe

Orig Pub : Zh. mikrobiol., epidemiol. i immunobiol.,
1956, No 12, 12-17

Abstract : From 48-hour cultures of H. pertussis (HP),
complete antigens were prepared according to
the method of Topli (the method is described).
The mixture of complete antigens of smooth
and coarse forms contained exo- and endotoxin
HP. The toxicity of the preparation was

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Animals. Bacteria. Hemophilus Bacteria. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24072

neutralized by rabbit or sheep serum, ob-
tained by means of immunizing the animals
with exo- and endotoxin HP. In 1 ml. of
preparation, which was called a subneutral
mixture (SM), there were contained exo- and
endotoxin, 15 Dlm of each, made harmless by
the specific immune sera, and 0.25-0.5 Dlm
of each one not rendered harmless. The mice
were immunized by triple introduction of SM
subcutaneously, with 7-day intervals. Non-
immunized mice, and mice which received
specific serum in doses equal to those con-
tained in the utilized SM, served as control.
The animals were infected 10-40 days after
the last injection. 5 series of SM were

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24072

checked: 4 of them contained sheep serum and one contained rabbit serum! Mice immunized three times were unsuceptible to infection with 10 Dlm of HP, 20-30 Dlm of exotoxin, and 50 Dlm of endotoxin. The control animals perished in 100% of cases from 1-2 Dlm of the culture and exotoxin HP. Even a single immunization of mice with SM in a dose of 0.2 ml., assured the survival of 100% of animals in introduction to them of 1-2 Dlm of culture and exotoxin HP, while the non-immunized mice perished 100%. The immunizing properties of SM after 6 months of preservation under room temperature, decreased somewhat. However, the agglutinins titer in the sera of rabbits which

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Animals. Bacteria. Hemophilus Bacteria.

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24072

were immunized with SM, after 5 $\frac{1}{2}$ months of preservation, reached 1: 12,800 - 1 : 25,000; 0.05 ml. of serum neutralized 1 Dlm of culture and exotoxin HP; 0.1 ml. of serum removed the necrotic reaction of skin in the introduction of the culture and toxin. SM of complete antigens, which contain exo- and endotoxin HP, and specifically immune sera, possess, in the opinion of the authors, considerable antigenic properties and may be a sufficiently-active preparation for immunization against whooping cough. -- L. V. Lugovaya

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USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Hemophilus Bacteria.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24077

Author : Zaglukhinskaya, Ye. N.
Inst : Moscow Medical Institute
Title : The Action of Mycerin in Experimental
Whooping Cough Infection

Orig Pub : Uch. zap. 2-y Mosk. med. in-t, 1957, 7, 177-185

Abstract : The addition of mycerin (I) in the amount of
2.5 gamma/ml to the medium of Bordet-Gengou
completely inhibited the growth of H. pertussis.
In smaller concentrations of I (1.25-0.1
gamma/ml), the growth was considerably less
than in control cultures in a medium without I.
Mice, which were infected intranasally with a
virulent culture of H. pertussis, and then

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Animals. Bacteria. Hemophilus Bacteria.

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24077

received subcutaneously twice daily 1 mg of
I for the duration of 6 days, survived in
100% of cases: smaller doses of I only de-
layed the time of death of mice, as compared
with control mice. I protected the animals
from death only under the condition that the
treatment had started not later than 24 hours
after infection. Isolating H. pertussis from
the lungs of mice which were treated with I
was almost never successful while cultures
from the lungs of untreated animals gave com-
plete growth. The absence of a toxic action
of I in the dose utilized (2 mg) was shown.
-- M. A. Gruzman

Card 2/2

COMMUNIST CHINA / Microbiology. Microbes Pathogenic for Man and Animals. Bacteria. Hemophilus Bacteria. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24082

Author : Chang, K'uang-Hou; Yu, Yung-Ch'uang

Inst : Not given

Title : A Study of the Growth Factors of Haemophilus influenzae

Orig Pub : Wei-shen-wu hsueh-pao, Acta microbiol. sinica, 1958, 6, No 1, 8-14

Abstract : It was found that blood contains an inhibitor for the V-factor of growth of H. influenzae. This inhibitor is destroyed in heating of blood at 75-100° for the duration of 5-10 min. Liver broth that contains a definite amount of coenzyme I and hemin, which act as V- and

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COMMUNIST CHINA / Microbiology. Microbes Pathogenic for Man and Animals. Bacteria. Hemophilus Bacteria. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24082

X-factors respectively, may serve for H. influenzae cultivation without the addition of blood. -- From the authors' resume

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USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24084

Author : Chernaya, L. A.; Sakhnovskaya, G. K.
Inst : L'vov Scientific Research Institute of
Epidemiology, Microbiology and Hygiene
Title : The Problem of Tetanus During Peace Time
Orig Pub : Sb. nauchn. rabot. L'vovsk. n.-i. in-t
epidemiol., mikrobiol. i gigiyeny, 1957,
vyp 2, 157-165

Abstract : On the basis of the material from four
Western oblasts of the Ukrainian SSR for the
last few years, it was shown that the mortality
due to tetanus exceeds the mortality due to
dysentery, scarlet fever, measles, and
diphtheria; the lethality in tetanus is equal

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Animals. Bacteria. Anaerobic Bacilli.

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24084

to 35.8%. In 84.8% of cases, a rural popula-
tion was stricken, while 86.3% of the disease
rate occurred in April-October, i.e., during
the period of agricultural work. In the
majority of cases the tetanus disease affect-
ed the kolkhozniks or the children (agricul-
tural or household traumatism). A parallelism
was noted between the tetanus disease rate of
the population and the infection of the soil
with the spores of *Bacillus tetani*. The
authors recommend compulsory active immuniza-
tion of the population in epidemic foci. --
V. V. Vlodayets

Card 2/2

USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24088
Author : Kolesnikova, M. Kh.; Sokolov, S. K.
Inst : Not given
Title : Utilization of the Flocculation Reaction for
Study of Certain Properties of Tetanus
Antigens and Titration of Anti-Tetanic Sera.
Report II. Utilization of the Flocculation
Reaction for Titration of Anti-Tetanic Sera
Orig Pub : Zh. mikrobiol., epidemiol. i immunobiol.,
1958, No 5, 44-49
Abstract : Report I, see RZhBiol., 1958, 90952

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Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24091K
Author : Pletsityy, D. F.
Inst : Not given
Title : Experimental Study of Pathogenesis of
Tetanus Intoxication
Orig Pub : Medgiz, 1958, 143 str., ill.
Abstract : No abstract given

Card 1/1

USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24092

Author : Maksimovich, M. B.
Inst : L'vov Scientific Research Institute of
Epidemiology, Microbiology and Hygiene
Title : The Sensitivity of Animals to Infection with
Bac. perfringens as a Criterion of Their
Fitness for Creation of a Model of Dormant
Gas Infection

Orig Pub : Sb. nauchn. rabot. L'vovsk. nauchn. inst.
epidemiol., mikrobiol. i gigyeny, 1957,
vyp 2, 192-195

Abstract : The work was conducted on 172 experimental
animals. In experiments on mice, it was not
possible to induce gas infection by means of

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Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24092

subcutaneous introduction of 30-150 bil.
microbe bodies, emulsified in 0.5 ml. of
lanolin. Bac. perfringens were discovered
in the organs of infected mice. Subsequent
provocation (introduction of lanolin-microbe
suspension intramuscularly, prolonged irradiation of the animal with infra-red rays,
introduction of 2.5% CaCl₂ into the focal
region) also did not induce a flare-up of
dormant infection. In experiments on rabbits,
the introduction of 50 bil. of microbe bodies
with 2 ml. of lanolin, produced foci of dormant
infection. Subsequent provocation induced
aggravation; however, death of the
animals did not take place. The introduction

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Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No: 24092

of 100 bil. microbe bodies induced a typical gas infection. It was demonstrated that the creation of foci of dormant infection increases the titer of antitoxin in the blood of rabbits. In guinea pigs the introduction of 10 bil. microbe bodies, emulsified in lanolin, created the picture of dormant infection; furthermore, a part of animals perished. Greater doses induced death of guinea pigs 24-48 hours after the introduction. The author feels that guinea pigs are more sensitive to the introduction of Bac. perfringens than are mice and rabbits, and that they are the most fitting for the creation of a model of dormant gas infection. -- V. M. Roykhel'

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USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24094

Author : Ryabchikova, V. P.

Inst : L'vov Scientific Research Institute of
Epidemiology, Microbiology and Hygiene

Title : On the Action of Penicillin in Experimental
Gas Infection Induced by Bac. sporogenes

Orig Pub : Sb. nauchn. rabot. L'vovsk. n.-i. in-t
epidemiol., mikrobiol. i gigiyeny, 1957,
vyp 2, 185-187

Abstract : Mice were infected with Bac. sporogenes,
strain Weinberg, Staph. aureus strain
No. 209 and their combinations. Triple
introduction of 500 units of penicillin
sharply decreased the percentage of death of

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Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24094

mice from 66% to 6% in infection with Staph. aureus only, and had a small influence on the survival of mice infected with Bac. sporogenes. In infection of mice with Bac. sporogenes in combination with staphylococcus, the triple introduction of penicillin decreased the mortality of mice from 94% to 62%, which is explained mainly by the action of antibiotics on Staph. aureus. -- V. V. Vlodavets

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F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24095

Author : Vygodchikov, G. V.; Volkova, Z. M.;
Zelevinskaya, S. A.; Larina, I. A.

Inst : Not given

Title : The Significance of Antitoxic and Antibacterial Factors in Active Immunity Against Experimental Gas Gangrene Induced by B. perfringens

Orig Pub : Zh. microbiol., epidemiol. i immunobiol., 1957,
10, 120-125

Abstract : Animals were immunized with a concentrated, purified, sorbed anatoxin (CSA) of B. perfringens, with various protein fractions of microbe bodies of B. perfringens of type

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F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24095

"A", obtained according to the method of Kholchev, and a mixture of anatoxin with microbe fractions. I microbe fraction, which contained traces of toxin, induced the formation of an insignificant amount of antitoxin and agglutinins and a considerable amount of precipitins and complement-fixation antibodies. II and III microbe fractions, which did not contain toxin, did not induce the accumulation of antitoxin. The majority of animals of these groups turned out to be resistant to infection with 1 Dcl of spore culture of *B. perfringens*, that is, as a result of immunization with microbe fractions, antibacterial immunity had developed. In

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24095

immunization with CSA separately, or in a mixture with protein microbe fractions of antitoxin and bacterial antibodies formed in all rabbits. All rabbits turned out to be resistant to infection with a lethal dose of spore culture of *B. perfringens*. According to the authors, the antitoxin is the basic defensive factor in immunity against gas gangrene induced by *B. perfringens*. Antibacterial factors play a secondary role. --
E. R. Paley

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Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24096
Author : Cherkas, G. P.
Inst : Not given
Title : A Method of Preparation of a Preparation For
Active Immunization Against Cl. perfringens
and oedematiens
Orig Pub : Zh. mikrobiol., epidemiol. i immunobiol.,
1958, No 7, 60-65
Abstract : No abstract given

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USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24097
Author : Blagoveshchenskiy, V. A.; Ispolatovskaya, M. V.
Inst : Not given
Title : The Concentration and Purification of
Anatoxin Cl. histolyticus
Orig Pub : Zh. mikrobiol., epidemiol. i immunobiol.,
1958, No 5, 91-94
Abstract : No abstract given

Card 1/1

USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959. No. 24098

Author : Maksimovich, M. B.

Inst : L'vov Scientific Research Institute of
Epidemiology, Microbiology and Hygiene

Title : Specific Prophylaxis of Flare-Ups of an
Experimental Dormant Infection Induced by
Bac. perfringens

Orig Pub : Sb. nauchn. rabot. L'vovsk. n.-i. in-t
epidemiol., mikrobiol. i gigiyeny, 1957,
vyp 2, 206-212

Abstract : A model of dormant infection with Bac. per-
fringens with its subsequent provocation
after 1½-2 months was created with guinea pigs
and rabbits. The introduction, before

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24098

provocation, of 100 AU of antiperfringens
serum to guinea pigs weighing 400-450 g.,
protected 50% of the animals from gas gan-
grene; 150 AU protected 75% of animals, and
300 AU, 22 guinea pigs out of 23. Analogous
results were obtained in rabbits weighing 2½
kg. to each of which 1800 AU of antiper-
fringens serum was introduced. Specific serum
does not protect the animals in subsequent
provocations of dormant infection; also it
does not influence the changeability of
bacteria and their dissemination in the
organism. -- V. V. Vlodavets

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YUGOSLAVIA / Microbiology. Microbes Pathogenic for Man and Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24099

Author : Zaharija, I.; Zelenka, P.

Inst : Not given

Title : Bovine Enterotoxemia Induced by Cl. perfringens

Orig Pub : Veterin. arh., 1958, 28, No 1-2, 17-22

Abstract : 2 cases of a disease of cows with characteristic symptoms of enterotoxemia are described. After the death of animals, Clostridium perfringens type A and Cl. septicum in one cow and a pure culture of Cl. perfringens type A in the other were isolated from the spleen. The authors assume that Cl. septicum penetrated into the spleen after the

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24099

death of the animals. Cases described in the literature of enterotoxemia in domestic animals and men conditioned by Cl. perfringens, are cited. -- V. V. Vlodavets

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USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24100

Author : Kagan, F. I.; Kolesova, A. I.

Inst : State Scientific-Control Institute of
Veterinary Preparations

Title : Study of the Etiology of Bradsot-like Diseases
of Sheep

Orig Pub : Tr. Gos. nauchno-kontrol'n. in-ta vet.
preparatov, 1957, 7, 211-216

Abstract : In the Azerbaydzhan SSR, a farm was investi-
gated where unfavorable conditions prevailed
in respect to Bradsot and infectious entero-
toxemia. The mortality of sheep took place
despite the carrying out of vaccinations
with bivalent formol-aluminous vaccine,

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24100

prepared against these two infections. The
death of animals took place, as a rule, 15-30
min. after the onset of the disease. The
clinical picture and pathological-anatomical
data are described. From fresh carcasses of
14 animals, cultures were made from paren-
chymatose organs, heart, abomasum, small and
large parts of the intestines. Isolation
of *B. perfringens*, *B. oedematiens*, *B. gigas*,
V. septique, *B. sporogenes*, *B. sordelli* in
pure or mixed culture, showed that a mixed
infection induced by various anaerobic
causative agents took place at the farm.

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USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24101

Author : Kagan, F. I.; Kolesova, A. I.
Inst : State Scientific-Control Institute of
Veterinary Preparations

Title : Results of Tests of Polyvalent Concentrated
Aluminum Hydroxide Vaccine Against Bradset,
Enterotoxemia of Sheep, and Dysentery of
Lambs

Orig Pub : Tr. Gos. nauchno-kontrol'n. in-ta vet.
preparatov, 1957, 7, 217-224

Abstract : From a mixture of cultures of *Vibrio septicus*,
Cl. oedematiens and *Cl. perfringens* of type B,
7 series of vaccines were prepared, and ad-
sorbed on hydroxide of aluminum, to be used

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24101

against bradset, infectious sheep entero-
toxemia, and lamb dysentery. All the series
of the vaccine turned out to be sterile, harm-
less, and active and preserved their properties
for the duration of 13 months. 18-20 days after
a single vaccination, the rabbits turned out
to be protected from infection with a lethal
dose of *V. septicus*, *Cl. oedematiens*, *Cl.*
perfringens of type B or C. The sheep,
immunized twice with 2 or 3 ml. of vaccine
with an interval of 25 days, were infected
after 4 months with a lethal dose of one of
the virulent cultures of the above-named mi-
crobes. All vaccinated sheep survived. Lambs,
born from vaccinated sheep, acquired immunity

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USSR / Microbiology. Microbes Pathogenic for Man and
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F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24101

to Cl. perfringens of type B after feeding with mothers' milk. The testing of vaccine against bradsot and sheep enterotoxemia and lamb dysentery on an unsafe farm resulted in a 16 times lesser mortality as compared with the control group. In a study of the etiology of the disease, mixed infection was established and the following anaerobic causative agents were isolated: B. gigas, V. septicus, Cl. perfringens, Cl. oedematiens, Cl. sordellii and Cl. sporogenes. -- G. Ye. Frumkina

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NORTH KOREA / Microbiology. Microbes Pathogenic for Man
and Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24102

Author : Ten. Syn Pkhar

Inst : Not given

Title : Experimental Investigation of Immunity in Emphysematose Carbuncle. 1. Experiment of Infection and Immunization of Guinea Pigs with Consideration of the Place of Vaccination. 2. The Immunogenicity of the Vaccine

Orig Pub : Nonop kvakhak enguvon khakio, Vestn. n.-i. in-ta s.-kh., 1958, 3, No 1, 63-71

Abstract : No abstract given

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USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24105
Author : Kovtunovich, L. G.
Inst : Not given
Title : Study of a New Method of Finding Toxin B.
botulinus
Orig Pub : Zh. mikrobiol., epidemiol. i immunobiologii,
1957, No 8, 84-90

Abstract : Experimental checking was conducted of the
method of fast finding of botulin toxin (BT)
according to the change of the phagocytic
index with respect to staphylococci in the
presence of BT, proposed by Minervin (Zh.
mikrobiol., epidemiol. i immunobiol., 1955,
No 5, 48; 1956, No 6, 44). The experiments

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Animals. Bacteria. Anaerobic Bacilli.

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24105

were performed with BT of type A. It was
shown that by this method it is possible in
the course of 1-3 hours to find and typify
small amounts of BT; the method turned out
to be more sensitive than the biological
test on white mice. It was possible to
isolate the toxin in the blood of infected
white mice, in the blood of sick humans as
well as in infected products. However, the
author notes that even in strict compliance
with all methodological instructions, con-
flicting results sometimes occur and he
recommends to retain the parallel exposure
of BT in mice. -- Yu. Z. Gendon

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F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24106

Author : Gendon, Yu. Z.

Inst : Not given

Title : Study of Botulin Antigens and Antisera by
Means of Zonal Electrophoresis and Diffusion
Precipitation in Agar

Orig Pub : Zh. mikrobiol., epidemiol. i immunobiol.,
1958, No 2, 95-100

Abstract : Investigation of 55 series of botulin toxins
of type A, showed that the toxins obtained
in cellophane bags were in regard to the
amount of DIm (for a mouse) 10-40 times more
active than the simple toxins, and contained
in 1 ml. up to 60 mil. DIm while the usual

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toxins contained 60-200 thousand DIm; the
toxins possessed high flocculation activity,
and gave the reaction of ring precipitation
even in dilution to 14-16 times; there is
contained in them about twice as little amine
and total N than in the usual toxins. By
the method of diffusion precipitation on agar,
it was discovered that in toxins obtained in
cellophane bags, there are less ballast
antigenic fractions than in the usual toxins,
and the fraction which is connected with the
proteins of nutrient medium is absent. By
means of preparative electrophoresis on fil-
ter paper, it was shown that the basic carrier
of antitoxin in native sera is T-globulin

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24106

fraction! By the method of immunoelectrophoresis on agar it was discovered that in antitoxin antitoxic horse sera of type A, the precipitating bodies were contained in the same protein fractions as the antitoxic. In botulin toxins of type A 5, protein fractions are differentiated, of which only one is a basic carrier of the toxic inception: precisely that fraction is prevalent in toxins obtained in cellophane bags. Botulin toxins of type A, obtained in cellophane bags, are rendered wholly harmless by formalin, and anatoxins which are obtained thereby are more active than the usual ones, in antigenic as well as immunogenic properties.
-- Yu. G. Talayeva

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Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24107

Author : Minervin, S. M.

Inst : Not given

Title : Results of Many Years of Observations in the
Study of Botulism

Orig Pub : Zh. mikrobiol., epidemiol. i immunobiol.,
1957, No 10, 30-35

Abstract : On the basis of lengthy incubation period in a number of patients with botulism (B), cases of a repeated wave with clinical signs of botulism, the discovery of pure culture of causative agent in various organs of cadavers, and the late discovery of toxins in the organs of cadavers, the author regards B as

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F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24107

a toxic-infectious disease. Experiments on guinea pigs showed that toxin introduced in sublethal doses conditions the subsequent multiplication of microbes and the additional production by them of toxin in the organism itself; moreover, toxin sensitizes the organism not only to the microbe, but also to the toxin B. The same effect was produced by other nonspecific substances (extract of decaying protein, filtrates of toxigenic cultures of proteus vulgaris). Toxin B suppressed the phagocytic activity of leukocytes of blood (experiments in vitro and in vivo) and hystiocytes of healthy animals. The method of determination of the phagocytic

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Animals. Bacteria. Anaerobic Bacilli.

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24107

index may be utilized for early diagnosis of B in humans. The basic place of production of toxin in the organism is the gastro-intestinal tract, first of all the small intestine. A favorable influence on the course of B in guinea pigs and white mice was exerted by the utilization of caffeine and theophylline, apparently, as a result of their diuretic action. The best therapeutic effect was obtained by using antitoxin serum, introduced by a combined parenteral and enteral method. -- E. R. Paley

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Animals. Bacteria. Anaerobic Bacilli.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24111
Author : Koroleva, G. A.; Matveyev, K. I.; Volkova, Z. M.
Inst : Not given
Title : Obtaining Bi- and Polyvalent Antibotulin Sera
of Types A, B, C, E from Horses. Report II
Orig Pub : Zh. mikrobiol., epidemiol. i immunobiol.,
1958, No 5, 83-87
Abstract : No abstract given

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HUNGARY / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Mycobacteria. Myco-
bacterium Tuberculosis.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24123
Author : Schweiger, Otto
Inst : Not given
Title : Catalase Activity and Virulence of Isoniazid-
Stable Mycobacteria Tuberculosis
Orig Pub : Tuberkulozis, 1958, 11, No 3-5, 81-84
Abstract : No abstract given

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USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Mycobacteria. Mycobacterium
Tuberculosis. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24126

Author : Rudoy, N. M.
Inst : Not given
Title : Clinic of Tuberculosis in Adults. Clinical
and Epidemiological Significance of the
Stability of Mycobacteria Tuberculosis to
Isoniazid (According to Materials in the
Foreign Periodical Literature)

Orig Pub : Sovrem. probl. tuberkuleza, Sb. perev., obz.
i ref. in- period. lit., 1958, No 4, 20-26

Abstract : No abstract given

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USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Mycobacteria. Mycobacterium
Tuberculosis. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24129

Author : Aseyev, D. D.
Inst : Not given
Title : Materials on the Discovery of Drug-Stable
Mycobacteria Tuberculosis in the Sputum of
Patients with a Chronic Fibrous-Cavernous
Process in the Lungs

Orig Pub : Probl. tuberkuleza, 1958, No 4, 14-20

Abstract : No abstract given

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USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Mycobacteria. Mycobacterium
Tuberculosis. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24131
Author : Jurgelionis, A.
Inst : Not given
Title : Filtrable Forms of Mycobacteria Tuberculosis
and Their Pathogenic Significance
Orig Pub : Sveikatos apsauga, 1958, No 2, 21-27
Abstract : No abstract given

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USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Mycobacteria. Mycobacteria
Leprae. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24138
Author : Torsuyev, N. A.
Inst : Turkmenian Scientific Research Dermatological-
Venerological Institute
Title : Materials for History of Leprosy in Turkmenia
Orig Pub : Tr. Turkm. n.-i. kozhno-venerol. in-ta, 1957,
5, 204-209
Abstract : No abstract given

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GDR / Microbiology. Pathogenic Fungi and Actinomyces.

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24148

Author : Mampel, Eberhard

Inst : Not given

Title : The Significance of Phase-Contrast Microscopy
for Examining Sputum for Fungi

Orig Pub : Z. ges. innere Med., 1957, 12, No 17, 796-800

Abstract : Poorly-staining fungi elements in sputum are well visible when examining a native preparation in the modern phase-contrast microscope. Multiple series of investigations, necessary in the clinic of endogenic mycoses, are thereby considerably simplified. Instead of permanent preparations, microphotographs may be made. In the article, the principles and methods of phase-contrast microscopy are

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Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24148

expounded, and 4 pairs of microphotographs of fungi under the ordinary and the phase-contrast microscopes are included. --
M. A. Gruzman

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